



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/808,227

03/24/2004

John O'Donnell

702474.007B

5018

7590

12/11/2006

Thomas F. Bergert
Williams Mullen, PC
Suite 700
8270 Greensboro Drive
McLean, VA 22102

EXAMINER

RAO, SHEELA S

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,227	O'DONNELL, JOHN	
	Examiner	Art Unit	
	Sheela Rao	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response to the Restriction requirement filed on 29 September 2006 has been entered and considered.
2. Claims 1-23 are pending and presented for examination. Claims 1-13 have been withdrawn and claims 14-23 have been elected.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,701,727 issued to Komatsu et al.

The patented invention issued to Komatsu et al. (hereinafter "Komatsu") teaches of a management system and method which can forecast inspection time before changing the performance in a heat source unit. The operating condition of the heat source unit is monitored by a central monitoring unit of the management apparatus connected to the source unit through an information communications network allowing for remote control. Further, the operating data of the source unit is analyzed for purposes of diagnosis so as to reduce loss.

The teachings of Komatsu fairly suggest the limitations of the instant invention. With regard to the receiving of forecasted load information associated with the on-site power generation arrangement and determining a suitable operating point, as per claims 14 and 20, the patented invention explains that signals are received from the sensors for measuring quantities of portions to grasp the operating condition of the source unit. These signals are then stored and further analyzed. See column 7, line 63 through column 8, line 67. The step of determining a reliability factor, as per claims 14, 18, and 19, that

includes a number of different items related to temperature is taught at column 8, lines 60-67. As per the forecasting of electric and thermal load information as in claims 15 and 17, the patented reference teaches of collecting history data upon start up and shut down of the source unit so as to have compiled heat data for purposes of estimation, see column 2, lines 41 et seq. The limitation of instant claim 16 that calls for the determination of economic operating points for the unit is detailed by Komatsu at line 7 of column 11; wherein the economic factors involved in the operation of the arrangement are explained. The features of the site controller as claimed in instant claim 21 wherein the means for converting control data into signals and delivering the signals to the units is claimed, is taught beginning at line 63 of column 7 in which the aspects of the central monitoring unit is detailed. With regard to the analytical elements of the instant invention as per claims 22 and 23, Komatsu teaches the analytical processing for diagnosis in column 9, line 41 et seq.

Although the patented invention by Komatsu does not specifically teach the determination of optimal dispatch schemes for power generation as per the limitations of the instant claims, the reference of prior art teaches the analyzing and diagnosis for optimization in managing heat source units for an air conditioner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the methodology used by Komatsu for optimizing a power dispatch schema for power generation so as to reduce cost and improve usage.

Conclusion

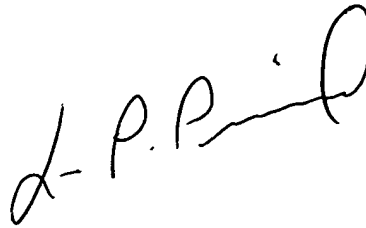
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Wednesday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. The fax number for the organization where this application or any proceeding papers is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheela S. Rao
December 6, 2006



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100